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Monetary policy under the Labour government 1997-2010: the first 13 years of the MPC

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Abstract

This paper examines the performance of monetary policy under the new framework established in 1997 up to the end of the Labour government in May 2010. Performance was relatively good in the years before the crisis, but much weaker from 2008. The new framework largely neglected open economy issues, while the Treasury's EMU assessment in 2003 can be interpreted in different ways. Inflation targeting in the UK and elsewhere may have contributed in some way to the eruption and depth of the financial crisis from 2008, but UK monetary policy responded in a bold and innovative way. Overall, the design and operation of monetary policy were much better than in earlier periods, but there remains scope for significant further evolution.

JEL: E5, E65

Keywords: monetary policy, central bank independence, European Monetary Union, house prices, financial crisis

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I. Introduction

This paper covers the monetary policy framework and the decisions made within it over the lifetime of the Labour government. The first measure in this area taken by the new government in 1997 was to shift control of interest rates from the Chancellor of the Exchequer (minister of finance) to a new Monetary Policy Committee (MPC) at the Bank of England (BoE). The MPC was and is in principle ‘independent’ of the government, but its members are chosen directly or indirectly by the government and it works to a remit (primarily a specific inflation target) set by the government. Thus, while it is clear that the government was responsible for the framework it must also assume some responsibility for the decisions taken by the MPC within that framework. There is no evidence that the decisions were out of line with what could have been expected from the framework, so this paper therefore considers them both, commenting where appropriate on the relationship between the two.

Figure 1 shows the BoE’s policy rate (Bank rate) over the period (with the Labour government’s term defined by the vertical black lines), together with the Federal Reserve Board (Fed)’s Federal funds rate and the European Central Bank (ECB)’s main refinancing rate. The UK rate shows three clear upswings and three clear downswings: up from May 1997 to June 1998 (there had been a rise also in October 1996); down from October 1998 to June 1999; up from September 1999 to February 2000; down from February 2001 to July 2003; up from November 2003 to July 2007 (interrupted by a small cut in August 2004); and down from December 2007 to March 2009. It is noticeable that successive peaks, on the one hand, and successive troughs, on the other, were lower. While the UK policy rate moved broadly in line with international (US and euro area) rates, the UK rate was typically higher – we return to this comparison below.¹

Sections II-VI of the paper consider a range of issues: the new framework and the overall performance of policy (with an emphasis on the Great Moderation up to 2007); the sterling exchange rate and the balance between traded and non-traded sectors in the economy; the issue of the UK's adoption of the euro; the eruption of the financial crisis, with particular attention to house prices; and the operation of policy in the early years of the crisis, up to the end of the Labour government in May 2010. Section VII offers some conclusions.

II. The new framework and the overall performance of monetary policy

How did the new monetary policy framework² perform in the long tranquil period before the financial crisis? We consider in turn the change in the framework, the outturn for inflation and economic activity (in both the Great Moderation and the crisis period at the end of Labour's term), the interest rate-setting behaviour of the MPC, some international comparisons and the appointment of MPC members.

(1) Bank of England 'independence'

In the new framework introduced in June 1997 the government continued to set the inflation target, but a new Monetary Policy Committee was given operational responsibility for setting interest rates so as to hit that target. The new legislation defined the BoE's objective as "to maintain price stability and, subject to that objective, to support the government's economic policy, including its objectives for growth and employment" (Rodgers, 1998, p. 93), a formulation broadly comparable to those of the Bundesbank and the ECB. The MPC had nine members, the Governor and two Deputy Governors, two other senior BoE staff, and four 'external' members appointed by the Chancellor. The first three were appointed for five year renewable terms, the last six for three year renewable terms. The government retained

responsibility for deciding the exchange rate regime, but the BoE had a pool of foreign exchange reserves which it could use at its own discretion in support of its monetary policy. Banking supervision (together with a large number of staff) was transferred from the BoE to the new Financial Services Authority, and debt management was transferred to the new Debt Management Office, an agency of the Treasury.

The big innovation to the monetary policy framework was the allocation of interest rate decisions to the MPC (in the previous few years the BoE Governor made formal recommendations on interest rates, which were published with a six week lag, to the Chancellor who then took the decisions). The target was set by the government, and in principle re-set every year in the Budget, but the only change over the period was from 2.5% on the RPIX to 2% on the CPI (a UK version of the Harmonised Index of Consumer Prices used in the euro area).^{3,4} In addition, the BoE increased the resources it put into forecasting, and further developed the quarterly *Inflation Report*, in which it continued to publish the fan chart forecasts it had initiated in February 1996. Accountability was provided through various mechanisms, including an annual report to Parliament and regular appearances by senior BoE personnel before the Treasury Select Committee.

In terms of the standard indices of central bank independence, Cobham, Cosci and Mattesini (2008) assess the BoE's independence on the Cukierman, Webb and Neyaptı (1992; Cukierman, 1992) unweighted index as rising to 0.70 (on a maximum of 1.0), from 0.57 since 1993 and 0.31 before that. On the Grilli, Masciandaro and Tabellini (1991) indices, Cobham et al. evaluate the BoE's political independence as rising from 1 (out of 8) in 1971-97 to 1.5, and its economic independence as rising from 4 (out of 8) in 1971-93 through 5 in 1993-97 to 8 from 1997.⁵ At the same time the BoE became one of the most transparent of major central

banks, doing significantly better than the Fed or the ECB on the Eijffinger-Geraats (2006) index, and being the only central bank to score 1.0 on the Laurens, Arnone and Segalotto (2009) measure of transparency.

The announcement of the new framework was well received – for example, the *Economist* (1997) described it as “an astonishingly bold start... The move was welcome and overdue” – and the immediate impact in the financial markets was a significant fall in government bond yields. As Chadha, Macmillan and Nolan (2007) have shown, medium and long-term yields fell by some 50 basis points (bps) between the days before and after the announcement, a fall which they interpret as the result of the new framework demonstrating an increase in the policymakers’ aversion to deviations of inflation from target and vindicating the change in framework.

A less sophisticated but longer term perspective on this phenomenon is provided in Figure 2, which shows the spreads between UK and German bond yields, and between French and German bond yields, over a 30 year period.⁶ UK and French spreads over German yields were falling on balance over the 1980s and 1990s, and a particularly sharp fall in the UK spread can be seen in the second half of 1997 and again in 1999. By 2000 the UK spread was in line with that of France which was now in a currency union with Germany. The French spread remained close to zero until the financial crisis in late 2007 and, in particular, the development of the euro crisis in 2010. The UK spread, however, rose somewhat in 2003, but stayed well below its levels of the 1980s and early 1990s.

(2) Inflation and economic activity

Figure 3 shows the outturn for inflation, on both the CPI and the RPIX, with the respective targets shown by dashed lines. Over the RPIX target period, from 1997 Q2 to 2003 Q4, inflation on the RPIX averaged 2.40% as against the target of 2.5%, and it never deviated from the target (in either direction) by more than 1%, the level which under the framework requires the BoE Governor to write an open letter to the Chancellor explaining why the deviation has occurred, how long it is expected to last and what measures have been taken to eliminate it.

Over the CPI target period from 2004 Q1 to 2010 Q2, CPI inflation averaged 2.39% as against the target of 2%, but this can be divided between the Great Moderation years up to 2007 Q4 when it averaged 2.01% and the crisis period 2008 Q1 to 2010 Q2 when it averaged 2.99%.⁷ CPI inflation rose to a peak of 4.77% in 2008 Q3, fell back to 1.50% in 2009 Q3 but was back to 3.43% in 2010 Q2, and the Governor was obliged to write letters about the inflation deviations to the Chancellor in April 2007, June, September and December 2008, March 2009, and February and May 2010. The fluctuations in inflation reflect a number of factors, of which the most important were the movements in energy prices, the sterling depreciation of 2007-8 and the larger than expected pass-through from that, and the 2.5% VAT cut from December 2009 to December 2010.⁸ Consumer inflation expectations (for 12 months ahead), however, although they rose briefly in 2008, remained otherwise close to the target throughout the period, and expectations for longer horizons (and expectations in the financial markets) were always close to target;⁹ this may reflect in part the high degree of transparency noted above.

Figure 4 shows the outturns for three indicators of economic activity: the percentage change in GDP since four quarters before, the unemployment rate (Labour Force Survey) and a

pseudo output gap, measured as the deviation of GDP from a linear and quadratic trend estimated over the period 1975 Q1 to 2008 Q4.¹⁰ Before the crisis economic growth fluctuates but is always positive and generally strong, with a 1997 Q2 to 2007 Q4 average of 3.27%. After that, however, it deteriorates sharply with a 2008 Q1 to 2010 Q2 average of -1.79%. Unemployment, which had been on a declining trend since 1993 Q4 (when it was at 10.3%), continued to fall though more slowly after 2001, reaching a low of 4.7% at the end of 2004 and then hovering around 5.2% until 2008, when it began to rise more strongly, with a peak of 8.0% in 2010 Q1. The output gap, on the simple measure used here, fluctuates in the pre-crisis period between lows of -1.4% in 1997 Q1 and 2006 Q4 and a high of 2.0% in 2003 Q4, but falls sharply from early 2008 to reach -14.5% in 2010 Q2.

What this all amounts to is good economic performance between 1997 and 2007, with low and relatively stable inflation, constant and solid growth, and declining or low unemployment; but a sharp deterioration from late 2007 or 2008 in both inflation, which was repeatedly higher than expected, and growth, which fell sharply. Unemployment also rose, but by less than might have been expected and in 2010 it was still below the levels of the much shallower recession of the early 1990s. Good performance in the first decade was partly due to exogenous and/or international factors (Stock and Watson, 2003; Bernanke, 2004; Bean, 2005), but the fact that the UK did better than the US or the euro area (see below) suggests policy played a role as well as luck.

(3) The behaviour of the MPC

The introduction of the new framework broadly coincided with the fashion for Taylor-rule-type estimates of central banks' reaction functions initiated by Clarida, Galí and Gertler (1998). Studies of the reaction function of the MPC over (parts of) our period include those

by Adam, Cobham and Girardin (2005), Goodhart (2005) and Cobham and Kang (2012a). Adam et al. (2005), who were particularly concerned with the role of overseas interest rates in earlier subperiods and used the GMM approach of Clarida et al., found for the 1997-2002 period a well-defined relationship between the UK interest rate and the standard domestic variables (inflation and the output gap) with overseas interest rates entering as instruments for those variables but not as independent variables in the reaction function. According to their results the MPC reacted strongly to inflation deviations, so that the Taylor principle was clearly fulfilled.

Goodhart (2005) adopted an alternative approach to estimating the reaction function, in which he used what he called 'ex ante forecasts' of inflation and output growth, constructed by using the parameters from the BoE's published macroeconomic model to 'subtract' the effect on inflation and output growth of the policy rate changes decided by the MPC in the previous quarter from the published (ex post) forecasts, so as to obtain the forecasts the MPC would have had in front of it before it took its interest rate decisions. He then used these forecasts to estimate, for the period 1997 Q3 to 2003 Q3, the effect of forecast deviations of inflation and output growth from target and trend on the change in policy interest rates. The Taylor principle was again fulfilled, but the new findings were that policymakers seemed to respond most strongly to forecast deviations seven or eight quarters ahead, instead of the three to four quarters ahead typical of the standard GMM estimates, and that there was no place for gradualism, or interest rate smoothing. In both respects Goodhart's results were closer to what the MPC says, and informed believers understand, about its own behaviour.

The contrast between these two approaches was examined in more detail and over the whole of the pre-crisis period by Cobham and Kang (2012a). In a search over a wider grid of

horizons they find that the standard GMM estimation fits best for horizons of three or four quarters on inflation and one quarter on the output gap,¹¹ while the ex ante forecast approach fits best for horizons of seven or eight quarters for inflation and one quarter for output growth. The latter are both closer to what the MPC claims to do and more in line with the BoE's publications on the transmission mechanism. In addition, under the ex ante forecast approach (but not under the standard approach) there is no need for interest rate smoothing to ensure a good fit. On these ex ante forecast estimates the Taylor principle is clearly satisfied, with the policy rate rising in the next quarter by over 1% in response to a 1% inflation shock. What this suggests is that the MPC did indeed follow its mandate, reacting strongly and fully to keep inflation broadly on target, and without interest rate smoothing.¹²

(4) International comparisons

Table 1 provides some international comparisons, for the euro area and the US and their central banks, over the period 1999 Q1 to 2007 Q4 (we consider the later period in section VI). First, on these data (CPI data from IFS, which should be comparable), UK inflation was well below that in the euro area, which was in turn well below that in the US. Secondly, output growth (measured as the four quarter change in GDP, comparable data from IFS) was highest in the UK and lowest in the euro area. It was also less variable in the UK. Thirdly, the output gap data, constructed as the residuals from a linear and quadratic trend up to 2008 Q4, also suggest that growth was less variable in the UK than in the US or the euro area. Fourthly, the nominal policy rate was on average higher in the UK and lower in the euro area, so that the real policy rate (measured ex post as the nominal rate minus inflation) was much higher in the UK than in the other areas, while the difference between the nominal policy rates in the US and the euro area was broadly equal to the difference in their inflation rates so that their real policy rates were similarly low. Fifthly, the ratios of the variability of the policy rate to

those of inflation, growth and the output gap suggest that the BoE was rather less ‘activist’ in this period than the Fed, but not clearly less so than the ECB.

All three currency areas experienced good economic performance in these years, as the result of some combination of good policy and good luck. However, the comparisons present something of a puzzle: in terms of inflation and growth the UK’s economic performance looks good compared to that of the US or the euro area, but this performance was accompanied by significantly higher interest rates. If spreads were the same in all currency areas (relevant data are not easily available so this is not clear), UK borrowers were in some sense worse off (and depositors better off). In a world of capital mobility and liberalised financial markets it seems highly unlikely that the differences could reflect differences in equilibrium real interest rates. In that case the obvious potential explanation is that the higher UK interest rates were associated with the sterling overvaluation discussed in the next section which may in turn have been associated with continuing (but, until 2007-8, falsified) expectations of depreciation.

(5) Appointments to the MPC

External members of the MPC are appointed for terms of three years which are renewable. These features are regarded within the literature on central bank independence as limits on independence, since the possibility of reappointment could motivate members to act in a way which would make reappointment more likely. In addition, for most of the period MPC appointments were entirely a matter for the Chancellor, who for many years rejected demands from the House of Commons Treasury Committee to be able to influence appointments. From 2007, however, MPC vacancies were advertised, and from 2009 there was a more formal

appointment procedure involving an interview panel which made recommendations to the Chancellor.¹³

The new framework specified that external MPC members would be people with relevant knowledge or experience, and the initial appointments – Alan Budd, Willem Buiter, Charles Goodhart and DeAnne Julius – certainly fulfilled that criterion. Over time the balance swung slightly away from members with strong academic backgrounds towards those with more business or City of London backgrounds and then back towards academics.¹⁴ However, while there has been criticism of some individual appointments there has been no strong claim that the people appointed have been consistently lacking in technical expertise, on the one hand, or with partisan political sympathies, on the other.¹⁵

One particular issue which concerned a number of external members in the early years, but was then addressed, was the question of research support for externals. Initially the latter had no resources, in the form of economists, allocated to them to carry out investigations that would allow them to support their arguments in the committee, whereas the internal members could draw on the full capacity of the Monetary Analysis group of economists. However, in late 1999 it was agreed to establish a small unit of economists to service the external members, each of whom subsequently had a few members of staff working for and reporting to them. This appears to have resolved the issue satisfactorily.

III. Open economy issues

The UK's exchange rate had been flexible, in principle and in practice (that is, there was no significant intervention¹⁶), since the exit from the Exchange Rate Mechanism (ERM) in September 1992, an event which had strongly affected the economic credibility of the

previous government.¹⁷ The focus of the new monetary framework announced in May 1997 was naturally on changes from the existing (1993-7) framework. Given that the new framework involved no significant change on that score little was said about sterling. However, it is striking that in the more substantial defences of the new framework (Balls, 1998; Balls and O'Donnell, 2002) there are arguments against the old exchange rate targets but virtually nothing about the likely behaviour of the exchange rate under the new framework. Balls (1998), for example, mentions open macroeconomics and (once) open economy macroeconomics but contains no references to anything that could be regarded as analysing open economy issues.¹⁸ There are of course arguments that a flexible exchange rate will automatically behave in an accommodating and helpful way under inflation targeting, but those arguments were not made in these writings.

What happened to sterling over the period was that the sharp appreciation which had started under the old regime continued through to late 1997, by when the nominal effective exchange rate was some 10% higher than the average for 1984-96, which covered the supposed overvaluation in the 1990-92 ERM period as well as the sharply lower rate that followed (Figure 5). At the time it was widely agreed that sterling was overvalued.¹⁹ However, that level was broadly maintained until 2008, with the effective rate changing little even in the face of the sharp depreciation and then appreciation of the euro against the dollar. Moreover, while costs and prices could have been expected to respond to this shift, the real effective exchange rate was also largely unchanged between mid-1997 and late 2007, at a level some 27% above the average for 1984-96. Sterling then fell sharply in 2008, which brought the nominal effective rate back to a little below its 1994-5 level but left the real rate still some 10% above its 1984-96 average.

Whether a high exchange rate matters or not depends among other things²⁰ on its possible effects on the balance between tradable and non-tradable goods production and the implications of changes in that balance for overall output and growth (and subsequently, perhaps, for developments at the more micro level such as relative earnings and income inequality). That it did so matter is suggested by Figures 6 (a) and (b), which show the growth of manufacturing, as a proxy for tradables, and services, as a proxy for non-tradables. Figure 6(a) shows a sharp fall in the growth rate of manufacturing around 1980 (the time of an earlier sharp appreciation), and both figures show a similar phenomenon from 1997: over the 1997-2007 period manufacturing more or less stagnated while services grew at a significant and consistent pace and, since services constitute a much higher share of GDP, the latter also grew broadly in line with services. Other factors were, of course, involved in the particularly rapid relative decline of UK manufacturing, but it is hard to believe that the exchange rate was not important.

The response of the monetary policymakers up to 2005 is analysed in detail in Cobham (2006), which argues that the MPC was well aware of what was happening, but was not able successfully to forecast *ex ante* or even explain *ex post* the movements in the sterling exchange rate. In addition, there was no way the misalignment could be addressed within the new monetary framework: arguments about reducing interest rates to try to undo the overvaluation were always overruled by arguments about the need to keep to the inflation target. In the depreciation between late 2007 and early 2009 the MPC continued to forecast the exchange rate in the same way as it had done since late 1999 – an average of the expectation that could be backed out from the relationship between foreign and domestic interest rates, on the assumption that uncovered interest parity holds, and the prediction of a constant exchange rate implied by a random walk model. This meant that the MPC was

continuously and substantially wrong about the exchange rate. It adjusted its starting point to the reality, but then typically forecast a small further depreciation rather than the much larger depreciations that took place between November 2007 and May 2008, and between August 2008 and February 2009.²¹ Moreover, the MPC was again unable to explain the depreciations ex post: relative interest rates could not explain much if anything, cyclical factors and downgrades to the markets' view of the UK's long-term prospects might explain a part, but much of the depreciation had to be ascribed to rises in the risk premium on sterling.²² In terms of its policy actions, however, it seems clear that the MPC acted to manage overall aggregate demand (in order to hit its inflation target), so that in effect it encouraged the more responsive output of non-tradables and services (while the output of tradables was constrained by the lack of competitiveness). The current account of the balance of payments was negative throughout but, for most of the period, not enormously so.²³

In short, it appears that open economy and exchange rate issues were neglected in the design of the new monetary framework. The actual movements of sterling were associated, at the least, with a profound change in the structure of output. But neither the movements nor the change could be addressed within the framework, not least because movements in sterling were typically erratic, not just in small short term fluctuations but in the two major sustained fluctuations over this period.

With reference to the puzzle highlighted in II(4) above, it is possible that a (sustained) expectation of depreciation (which the MPC may have shared with the markets, and whose inflationary consequences it may have feared) obliged the MPC to keep the UK policy rate significantly higher than international rates. Alternatively, it is theoretically possible that loose fiscal policy in the UK obliged the MPC to set the policy rate high in order to avoid

excess demand, and that in turn encouraged the overvaluation of sterling. But this argument could not apply to the earlier part of the overvaluation, when fiscal policy in the UK was tight both absolutely and relatively to the US and the euro area, and it seems doubtful that it is valid for the later part, when UK fiscal policy was a bit looser than that in the euro area but quite similar to that in the US. This issue clearly deserves further research.

IV. The vexed question of EMU

The Labour government came to power in a period when the Conservative government had suffered severe tensions over the EMU project, tensions which had not been assuaged by the opt-out from EMU which the government had secured in the Maastricht treaty negotiations in December 1991 or by the UK's forced exit from the ERM in September 1992. It was natural that Labour, in opposition and in government, should be wary about the issue,²⁴ and within a few months of its election (October 1997) the Chancellor announced a set of five 'economic tests' which the government would use to decide whether it was in the UK's economic interest to adopt the euro:

- are business cycles and economic structures compatible so that we and others could live comfortably with euro interest rates on a permanent basis?
- if problems emerge is there sufficient flexibility to deal with them?
- would joining EMU create better conditions for firms making long-term decisions to invest in Britain?
- what impact would entry into EMU have on the competitive position of the UK's financial services industry, particularly the City's wholesale markets?
- in summary, will joining EMU promote higher growth, stability and a lasting increase in jobs?

The Treasury's October 1997 assessment of these tests, a report of some 40 pages, stated that the UK economy was not yet sufficiently 'converged' with that of the euro area, and not yet sufficiently 'flexible' for joining the euro to be a success.

A further, more substantial, assessment was published in June 2003 (Treasury, 2003). This was the result of a major exercise by the Treasury, probably the largest piece of sustained research it has ever undertaken, with the 240 pages of the report being accompanied by 18 separate studies (some of them as large as the report itself) covering topics from business cycle convergence, through housing market structures and the equilibrium exchange rate of sterling against the euro, to the location of financial activity and the euro. In the course of the exercise the Treasury consulted a range of outside economists, including both those sympathetic to UK euro entry at some point and those clearly opposed, as well as others with more intermediate positions. The conclusion of the assessment was that, while progress had been made since 1997 on both convergence and flexibility, that progress was not yet enough. As Keegan (2003, 327-8) puts it, "There was something for everyone, in that the 'pro euro' camp could point to microeconomic benefits from greater competition, a lower cost of capital and closer trading links... microeconomic considerations taken together could... lead to a small increase in the economy's long term growth rate. On the other hand, the Treasury's reservations about subjecting the British economy to the 'one-size-fits-all' monetary policy were loud and clear, and, although the exchange rate had recently fallen towards more realistic levels, [the report] concluded that the economy was some way from 'sustainable convergence'."²⁵

There are essentially two different ways of evaluating this exercise. The first views it as an outstanding example of how policy decisions should be made: wide consultation on both

policy and purely technical issues, with full account taken of the range of views on all relevant subjects, allowing an informed and comprehensive evidence-based conclusion. The second views it as an example of a highly politicised strategy in which all sides are consulted, so that no one can complain that their views have been ignored, the reader is drowned in a mass of often highly technical material so that the overall issue becomes opaque and obscure, and in the end the political authorities can reach the conclusions which they prefer for largely political reasons.

Those conclusions may also have been affected by the political reality that it would almost certainly have been very difficult to obtain a majority in favour of UK euro entry in the referendum to which the government had committed itself. But commentators such as Keegan (2003, pp. 325-7) and Richards (2010, p. 177) have emphasised that Gordon Brown as Chancellor was concerned that joining the euro could be a significant mistake for the UK economy.²⁶

With hindsight it is easy to argue that the government made the right choice in not joining the euro. The report's emphasis on insufficient flexibility can be read as recognising the danger, highlighted in the so-called Walters critique, that price and cost levels in the euro area countries could become increasingly inconsistent, and there is no doubt that divergences in competitiveness were a growing problem in the euro area before the crisis. But it is hard to find in the report itself or the studies that accompanied it anything that could be regarded as predicting the more specific difficulties which befell the eurozone from the spring of 2010, mainly because the focus was on whether euro entry was (yet) appropriate for the UK, rather than on whether the euro union and its monetary and other arrangements were intrinsically well structured. Before the financial crisis the Treasury paid little attention to the financial

stability issues that became so important from 2010 (banking union, common deposit insurance, joint financial supervision, etc), and with respect to fiscal coordination the report was broadly supportive of the Stability and Growth Pact, but without much emphasis on the matter. It should also be noted that no proponent of entry in the early 2000s advocated entry at the existing exchange rate or in the existing conditions.

V. The new framework and the eruption of the crisis

Although Labour politicians sometimes portrayed the financial crisis as an exogenous shock originating outside the UK (and it is true that the US housing market made a special and major contribution to the crisis via the asset-backed securities acquired by banks outside the US), there is a line of argument which says that the monetary frameworks – in the UK as well as elsewhere – may have contributed to the eruption of the crisis. Borio and White (2004; see also Borio and Lowe, 2002) argued that western economic, monetary and financial systems had evolved in a way that made asset price booms and busts more likely. They noted that in recent years there had been lower and more stable inflation and lower short run output volatility, but more prominent credit and asset price booms and busts, and a higher incidence of financial crises. Moreover, these phenomena had appeared in the presence of more liberalised financial regimes, in which banks had been less constrained, and of monetary regimes in which central banks had been firmly committed to price stability (under formal or informal inflation targeting). Borio and his colleagues suggested that these changes to financial and monetary regimes, with the relaxation of financial and monetary constraints, might have increased the scope for the growth of financial imbalances during phases of expansion and so made the economic system more ‘elastic’, that is, more open to boom/bust cycles.

One way of making this argument more precise is to focus on the expectations engendered by different policy regimes. Under inflation targeting central banks take trouble to explain their reaction functions to the private sector and the markets, so that the latter will expect that a rise in inflation will be met with a rise in interest rates, and this helps to stabilise inflation expectations. But this refers to the inflation which central banks are targeting – inflation in goods and services. Meanwhile, as the result of financial liberalisation firms and households find it easier to borrow, where much of that borrowing is to fund transactions in assets of different kinds, and there is no mechanism which limits actual or expected asset prices. In fact, major central banks took the view that monetary policy should not concern itself with asset prices as such (though they should react to any asset price bust which would affect real economic activity and so inflation). This behaviour, often characterised as the ‘Greenspan put’ but promoted by a wider range of central banks and central bankers, implied a floor to asset prices but no ceiling, so it arguably encouraged risk-taking in asset markets. In this way inflation targeting could have permitted or even promoted asset price booms alongside stable goods and services inflation.

In addition to the nature of the climate fostered by central bankers’ stated attitudes to asset prices, there is the question of the way central banks in fact reacted to the rises in house prices which were crucial to the eruption of the financial crisis. The rises in the UK are shown in Figure 7, which also shows the Halifax house price/earnings ratio. House prices had been rising strongly under the previous regime but they then went through a series of cycles, with successive peaks at 13%, 17%, 26% and 20% before falling back into line with goods and services inflation at 2% in mid-2005. House price inflation then rose again, this time to a final peak of 11% in May 2007. All of this brought about an almost continuous rise in the house price/earnings ratio (whose previous highest peak had been 5.0 in 1989), from under

3.5 in most of the 1990s to a peak of 5.8 in mid-2007. In short, the house price rises in this period were very large by historical standards.

The response of the monetary policymakers to this phenomenon has been examined in detail (for the Fed and the ECB as well as the BoE) in Cobham (2013). That analysis shows that up until 2005 the MPC examined house price growth and its determinants with care, typically concluding that the growth was the result of fundamental factors, notably the long term decline in inflation and interest rates, rather than a speculative boom. But after 2005 (and after the departure of Nickell, the MPC member who had been most active in this regard) the MPC seems to have paid much less attention to the renewed rise in house price inflation.²⁷ In any case, there is no evidence that interest rates were ever changed in response to the movements in house prices.²⁸ On the contrary, the committee repeatedly articulated the orthodox view (which goes back to Bernanke and Gertler, 1999) that monetary policy should not react to asset price growth but should stand ready to respond if asset prices crashed. The only MPC member through the period who was sympathetic to the alternative view, the proposal that policy should ‘lean against the wind’ of asset price rises, was Wadhwani, who contributed (while he was on the committee) to the two most prominent expositions of this view (Cecchetti, Genberg, Lipsky and Wadhwani, 2000; Cecchetti, Genberg and Wadhwani, 2002).

It is, of course, not clear that leaning against the wind (LATW) was compatible with the MPC’s remit, which was to target inflation in goods and services (as measured by the RPIX and then the CPI). Cecchetti et al. (2000, 2002) argued that it was so compatible, especially since the MPC could choose to focus on a slightly longer time horizon than the two years it was currently using and since, as they emphasised, under LATW monetary policy would be

reacting to asset price misalignments rather than targeting asset prices. On the other hand, the proposal appeared to critics such as Allsopp (2010) to amount to the addition of an extra target, which might become more important in certain situations but would remain in the background at other times. However, the issue of its compatibility with the MPC's remit was never the main issue in this debate, insofar as it took place in and around the MPC, for the orthodox opponents of LATW concentrated on arguments about the difficulty of identifying asset price misalignments and the potentially serious side-effects on the real economy of LATW-inspired interest rate rises (see also Bean et al., 2010).

What emerges from this discussion for the evaluation of monetary policy in the period is this: the new framework may have contributed to a climate in which asset prices were freer to rise, and the MPC did not attempt to use interest rates to restrain house price inflation although some critics think it should have done so. However, it should also be said that action by and in the UK alone is unlikely to have had much effect on the eruption of the crisis, and even on its incidence in the UK, in the absence of similar action in the US, which was the dominant economy in the world and the one whose house price rises, fuelled by sub-prime lending, had the most impact on US and other banks' balance sheets.

VI. Policy in the early years of the crisis

For the UK the eruption of the crisis first took the specific form of the near collapse of Northern Rock in September 2007. In response the UK authorities (BoE²⁹ and government in cooperation) announced liquidity support for Northern Rock and then, a few days later, term auctions for liquidity against a broader than usual range of collateral. A Special Liquidity Scheme launched by the BoE in April 2008 allowed banks to exchange mortgage-based assets for Treasury bills. Northern Rock was nationalised in February 2008, and Bradford &

Bingley in September 2008, while the Lloyds TSB/HBOS merger went through in September 2008 with government support. Finally, the government announced a major bank rescue package in October 2008, under which it acquired large shares in the equity of RBS and the Lloyds Banking Group.

These measures were not monetary ones, for they had no intrinsic effect on either interest rates or the monetary aggregates. The monetary policy response came first in December 2007, with a 0.25% cut in the policy rate (which had been raised to 5.75% in July). The rate was cut by a further 0.25% in each of February and April 2008. Then in October, following the collapse of Lehmans in September and the consequent freezing of the interbank market, the MPC cut the rate from 5% to 4.5% in October (a cut coordinated with the Fed and the ECB), 3% in November and 2% in December 2008, and then to 1.5% in January, 1% in February and 0.5% in March 2009. At the March meeting the MPC also decided to embark on what came to be called quantitative easing, under which it purchased securities – almost entirely gilts – in the secondary market in exchange for increased reserves held by the banks at the BoE.³⁰

The March 2009 decision was for £75 bn of asset purchases, but the programme was extended by a further £50 bn in each of the May and August meetings, and a final £25 bn in November 2009. The entire amount of £200 bn was purchased in a relatively smooth and consistent manner, with the last purchases in January 2010. The size of the programme remained at £200 bn until it was expanded in October 2011, in what is often referred to as QE2, as opposed to the 2009-10 QE1.

QE was intended to be a form of monetary expansion at a time when the interest rate was at the effective lower bound: at its March 2009 meeting the MPC “remained concerned that a further reduction [in the policy rate] could have some adverse impacts on the economy, given its effects on the profits that banks and building societies were able to make through the spread between their deposit and lending rates. Deposit rates could not be reduced much further, and if these institutions were contractually obliged to pass on cuts in Bank Rate to some of their borrowers, that would squeeze their profits further, and potentially reduce lending capacity. In addition, a sustained period of very low interest rates could impair the functioning of money markets, creating difficulties in the future, when interest rates needed to rise.” On the other hand, asset purchases financed by the creation of bank reserves “were necessary in order to increase nominal spending growth to a rate consistent with meeting the inflation target in the medium term. Such operations were a natural extension of the Committee’s usual monetary policy operations. Given the Bank’s role as monopoly supplier of sterling central bank money, the Committee had previously chosen to influence the amount of nominal spending in the economy by varying the price at which it supplied central bank money in exchange for assets held by the private sector. Under the operations now under consideration, the Committee would instead be focusing more directly on the quantity of money it supplied in exchange for assets held by the private sector.” (MPC Minutes, March 2009, §§27, 30).

This policy was considered highly innovative at the time of its introduction (though the Fed began similar operations, described as large scale asset purchases, LSAPs, around the same time) and has subsequently been classified as ‘unconventional monetary policy’, but it is not far from the kind of operations the BoE undertook on a regular basis in the 1970s and 1980s when it bought, or more typically sold, gilts to influence the growth of broad money.³¹ In the

context of a decade and a half of inflation targeting and then the crisis, however, bold measures were called for and QE was indeed audacious, and the Labour government as well as the BoE deserve credit for that.

There have been a number of attempts to identify the effects of QE on inflation and real economic activity. Initial work concentrated on the effect on long-term interest rates, which seemed to be considered the main transmission channel (although the BoE's first statement on this, by Benford et al., 2009, had discussed a range of channels), but later work went on to consider the wider effects. An article in the BoE's *Quarterly Bulletin* (Joyce et al., 2011) reported a number of estimates of the peak effect of QE on real GDP and CPI inflation taken from ongoing research at the Bank, with a range for GDP of 1.5-2%, and for CPI inflation of 0.75-1.5%. Another investigation which focused more directly on broad money and its relation to nominal GDP found a somewhat larger impact (Cobham and Kang, 2012b). On the other hand, a recent survey by Martin and Milas (2012) argues that much of the effects on long-term interest rates were only temporary, and that later QE programmes in the UK and the US were less effective than the first ones.

However, the crucial issue in trying to estimate the effect of QE is the appropriate counterfactual: what would have happened if QE had not been implemented? The answer to that is not obvious, particularly but not only if the analysis is focused on the effect of QE on broad money.³² But anecdotal evidence suggests that most UK macroeconomists believe that the outturn for real GDP, at least, would have been much worse in the absence of QE, that is probably worse by a larger margin than the range given in Joyce et al. (2011).

Finally, it is interesting to complete this section by extending the data in Table 1 above, as in Table 2 (which omits the output gap data because of the difficulty of identifying meaningful gaps in the crisis period). The first part of the table covers 2008 Q1 to 2010 Q2, the part of the crisis under the Labour government, and the second part covers the whole period from 1999 Q1 (when ECB data is first available) to 2010 Q2. In the crisis period the UK has higher average inflation and lower average growth than the US or the euro area; the nominal policy rate remains higher on average than that of the US though lower than that of the ECB, but the real policy rate is no longer out of line with that in the US in the same way as before. For the whole period the main distinctions highlighted in section II(4) are still there: the UK has lower average inflation and slightly higher average growth (though growth is now more volatile), together with higher nominal and real policy rates. On the other hand, the ratio of the standard deviations of the policy rate and inflation suggests that in both the crisis and the overall periods the BoE was, on this score, more ‘activist’ than the Fed or the ECB.

VII. Conclusions

There can be no doubt that the monetary framework from 1997, which built on the changes introduced in 1993-4 but went beyond them with the crucial move towards BoE independence, was a major improvement on what went before. Credibility, transparency and accountability were improved and the simple outturns for inflation and growth, as shown for each period of government in Table 3, show much better inflation and, compared to the two previous governments, better growth.³³ During the Great Moderation, in particular, the economy performed strikingly well overall. Moreover, the claim that ‘boom and bust’ had been eliminated was true for that period – and indeed for the whole period if ‘boom and bust’ is understood to refer to the effects on economic activity and inflation of irresponsible and profligate demand expansion by the fiscal and monetary authorities.

However, under the new framework the MPC was unwilling or unable to address the issue of the sterling misalignment, which must have contributed to the growing imbalance in the economy, between tradables and non-tradables and between manufacturing and services. The MPC was also unwilling or unable to respond to the house price boom, of which at least a part seems unlikely to have been based on changes in the fundamentals. Moreover, the latter failure contributed to the incidence and the depth of the financial crisis that occurred at the end of the period.

It should also be noted that the MPC's remit and the new monetary framework as a whole were closely modelled on what was regarded as best practice in academic circles, particularly in the US. Its neglect of the exchange rate issue was in line with much of macroeconomic thinking in the US, where the economy is less open because of its size and the exchange rate is much less important. Its neglect of asset prices more generally was also in line with the dominant trends in US and other macroeconomic analysis.³⁴

Overall, the design and operation of monetary policy were much better under the 1997-2010 Labour government than in earlier periods. But there is room for significant further evolution.

Notes

¹ The UK policy rate over the Labour government period was also lower but more variable than that in the 1992 Q4 to 1997 Q1 'IT without independence' period: its mean and standard deviation were 6.1 and 0.5 in the earlier, and 4.6 and 1.8 in the later period.

² For discussion of inflation targeting per se see Roger (2010) and Schmidt-Hebbel (2010); for more detail on the UK variant see Cobham (2002) and Besley and Sheedy (2010).

³ The reason for changing to a different index has never been completely clear, but the reduction to 2% was not intended to mean a substantial policy change, since it was thought that 2% on the CPI was roughly equivalent to 2.5% on the RPIX. See Nickell (2003) and Besley and Sheedy (2010).

⁴ Moreover, the UK inflation target from 1997 was always clearly symmetric, so that deviations in either direction were equally undesired. For the ECB, by contrast, its initial formal definition of price stability as inflation of less than 2% was widely (but wrongly) interpreted as asymmetric.

⁵ These assessments include judgments with respect to the BoE's newfound instrument, but not goal, independence, which is not well covered in these indices. The main reason why political independence remained so low was that the Governor and board continued to be appointed by the government, and there were no legal provisions which protected the BoE from government pressure.

⁶ German bond yields can be taken as indicating market expectations of long term inflation in a country with full central bank independence and high credibility. The data are from the world tables of *International Financial Statistics*: the definitions of bond yields are not entirely consistent across countries, so what is important here is the changes in the spreads over time rather than their precise values.

⁷ In the RPIX period CPI inflation averaged 1.32%, as against 2.4% on the RPIX. Over 2004-7 RPIX inflation was 2.66% as against 2.01% on the CPI, and between 2008 Q1 and 2010 Q2 RPIX inflation was 3.47% as against 2.99%. Thus with the exception of the final period it could be argued that the switch to CPI in fact allowed a small rise in inflation.

⁸ See, for example, the *Inflation Report* for November 2010, section 4; Fisher (2010) and Bean (2010).

⁹ See, for example, the *Inflation Report* for August 2008 chart 4.7; February 2009 chart 4.14; and May 2010 chart 4.12 and the box on 'Recent movements in households' inflation expectations', p. 37.

¹⁰ ONS data. The aim was to measure the deviation from what potential GDP would have been expected to be in the absence of the crisis. It seems unlikely that trend GDP would have been affected before end-2008.

¹¹ Cobham and Kang also show that the standard approach suffers from a weak instruments problem.

¹² The existence of data on the votes of individual MPC members has spawned a literature which examines possible differences between members and types of member, e.g. Bhattacharjee and Holly (2006), Besley et al. (2008), Gerlach-Kristen (2009) and Hix et al. (2010). The findings of these papers are mixed, with few clear results overall; and the differences identified are relatively small.

¹³ There has also been concern about the lateness and speed with which appointments were often made. See, for example, Financial Times (2007).

¹⁴ A simple classification between academic, UK economic policy (i.e. Bank or Treasury) experience and business/City backgrounds, allowing for people to be split between two categories, suggests 1.5 to 2.5 academics in the early years, 1 only in the 2004-5 period but 2 academics again from 2006, and then 1 in 2009-10.

¹⁵ However, Hix et al. (2010) claim to have identified a ‘political business cycle’ element in appointments of external members, in the sense that more ‘dovish’ members were appointed in the run-up to elections and more ‘hawkish’ ones in post-election years.

¹⁶ However, Ilzetzki, Reinhart and Rogoff (2008) classify the UK’s exchange rate regime as managed floating from 1993 to 2000 and as a de facto moving band on the euro from 2001 to 2007.

¹⁷ It could also have affected that of the then Labour opposition, which had also supported ERM membership, but this was largely avoided (Keegan, 2003: chapter 5).

¹⁸ The word ‘open’ is used mainly with reference to transparency and accountability. Similarly, the references in Balls and O’Donnell (2002) list nothing by open economy economists such as Frankel, Obstfeld or Rose, and none of the open economy work of Rogoff or Calvo.

¹⁹ See, for example, the MPC minutes for August 1997, para 58.

²⁰ We have already seen that inflation and economic growth were relatively good in this period.

²¹ In November 2007, for example, the *Inflation Report* expected the Bank’s sterling effective rate index (ERI) to depreciate gently from 102.6 in the run-up to the forecast to 101.0 in 2009 Q4. In August 2008, with a starting point of 93.1 the expectation was for a depreciation to 91.9 in 2010 Q3. The corresponding outturn figures were 80.8 and 79.9.

²² See, in particular, the *Inflation Report* for August 2008 p. 12, and February 2009, pp15-16.

²³ Between 1997 and 2007 the current account deficit varied between 0.1% and 3.2% of GDP, with an average of 1.9%. Over the following three years the deficit was 1.4, 1.5 and 3.3% of GDP. US deficits, on the other hand, averaged 4.2% of GDP for 1997-2007. (OECD data)

²⁴ In addition, Keegan (2003) has drawn attention to a 1992 Fabian Society pamphlet by Ed Balls which was strongly opposed to the ERM and the UK’s membership of it.

²⁵ With respect to the points made in the preceding section, it should be noted that the study on the exchange rate and macroeconomic adjustment contains a wide range of references to work on open economy macroeconomics and the determination of exchange rates, but dismisses rather quickly the possibility that flexible exchange rates can be destabilising rather than stabilising.

²⁶ It is also widely believed that the issue of the adoption of the euro became a highly politicised element within the arguments between the prime minister and the chancellor. See for example Naughtie (2002: 130-33, 141-6) and Keegan (2003: ch. 12).

²⁷ Muellbauer and Murphy (2008) also argue that UK house prices were not clearly overvalued in 2005, but they concede that “By mid-2007, however, prices looked a little overvalued, even without the rise in interest rates between 2006 and 2007” (p. 12).

²⁸ The MPC also paid little attention to the rate of growth of M4 lending or M4 itself, both of which were relatively high in the mid-2000s before the crisis.

²⁹ It is widely thought that the BoE, and Governor King in particular, were slow and reluctant to respond to the initial problems at Northern Rock and to the wider problems in the banking system in the early part of the crisis (see, for example, Giles, 2012; Darling, 2011, 56-8).

³⁰ The Asset Purchase Facility at the BoE had been set up in January 2009 to purchase high-quality private sector paper, in order to improve the functioning of markets, but those purchases were financed by additional sales of Treasury bills by the Debt Management Office.

³¹ See Banque de France (2010), Borio and Disyatat (2010) and Nelson (2013) for further discussion of the background to and nature of QE.

³² See Bridges and Thomas (2012) and Cobham and Kang (2012b) on the ‘offsets’ to QE which tended to reduce monetary growth.

³³ There are, of course, many qualifications which can be made on these figures, e.g. with respect to changes between periods in the international environment and with respect to the inheritance and legacy of different governments. But the differences are large enough to suggest that the new framework was indeed an improvement.

³⁴ It may be noted that Besley and Sheedy (2010) make almost no mention of the exchange rate or of house prices.

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Table 1: International comparisons, 1999-2007

	inflation				output growth				output gap		
	mean	s.d. σ_π	min	max	mean	s.d. σ_g	min	max	s.d. σ_y	min	max
UK	1.56	0.56	0.61	2.84	3.17	0.86	1.29	4.69	0.84	-0.82	2.40
Euro area	2.09	0.44	0.79	2.90	2.30	1.12	1.06	4.45	1.43	-1.86	3.28
US	2.71	0.76	1.25	3.97	2.84	1.26	1.00	5.38	1.43	-0.94	4.57

	policy rate				real policy rate				ratios of s.d.s		
	mean	s.d. σ_i	min	max	mean	s.d. σ_r	min	max	σ_i/σ_π	σ_i/σ_g	σ_i/σ_y
BoE	4.81	0.74	3.5	6.00	3.25	0.96	2.10	5.39	1.30	0.85	0.87
ECB	3.03	0.89	2.00	4.75	0.94	0.91	-0.35	2.60	2.03	0.80	0.62
Fed	3.63	1.85	1.00	6.50	0.91	1.62	-1.62	3.31	2.42	1.47	1.28

Notes: data for 1999 Q1 to 2007 Q4; inflation is CPI as in *International Financial Statistics* (IFS); output growth is since four quarters before; output gaps are residuals from linear and quadratic trend estimates on data up to 2008 Q4; policy rate data are end-quarter; real policy rates are ex post, i.e. nominal policy rates minus inflation.

Sources: central bank websites for policy rates, other data from IFS.

Table 2(a): International comparisons, 2008-2010 Q2

	inflation				output growth			
	mean	s.d. σ_π	min	max	mean	s.d. σ_g	min	max
UK	2.98	0.94	1.46	4.81	-1.79	3.42	-6.87	3.07
Euro area	1.71	1.44	-0.38	3.86	-1.26	2.75	-5.28	2.35
US	1.81	2.20	-1.62	5.30	-0.97	2.86	-5.02	3.51

	policy rate				real policy rate				ratios of s.d.s	
	mean	s.d. σ_i	min	max	mean	s.d. σ_r	min	max	σ_i/σ_π	σ_i/σ_g
BoE	2.03	2.05	0.50	5.75	-0.96	1.84	-2.94	2.87	2.19	0.60
ECB	2.13	1.36	1.00	4.00	0.41	0.51	-0.61	1.38	0.94	0.49
Fed	0.80	0.84	0.25	2.25	-1.01	1.59	-3.30	1.87	0.38	0.30

Table 2(b): International comparisons, 1999-2010 Q2

	inflation				output growth			
	mean	s.d. σ_π	min	max	mean	s.d. σ_g	min	max
UK	1.87	0.89	0.61	4.81	2.10	2.71	-6.87	5.21
Euro area	2.01	0.79	-0.38	3.86	1.52	2.19	-5.28	4.45
US	2.52	1.28	-1.62	5.30	2.01	2.34	-5.02	5.38

	policy rate				real policy rate				ratios of s.d.s	
	mean	s.d. σ_i	min	max	mean	s.d. σ_r	min	max	σ_i/σ_π	σ_i/σ_g
BoE	4.20	1.63	0.50	5.75	2.33	2.11	-2.94	5.39	1.84	0.60
ECB	2.83	1.08	1.00	4.75	0.82	0.87	-0.61	2.60	1.36	0.49
Fed	3.01	2.05	0.25	6.50	0.49	1.80	-3.30	3.31	1.60	0.88

Notes and sources: see under Table 1.

Table 3: Average inflation and growth by governments

government: prime minister	GDP growth (4 quarter)	Inflation (RPI)
1964 Q4-1970 Q2: Wilson	2.58	4.38
1970 Q3-1974 Q1: Heath	3.63	8.68
1974 Q2-1979 Q2: Wilson/Callaghan	1.68	15.80
1979 Q3-1997 Q2: Thatcher/Major	2.10	8.35
1997 Q3-2010 Q2: Blair/Brown	2.29	2.70

Sources: GDP growth from *International Financial Statistics*; RPI from ONS.

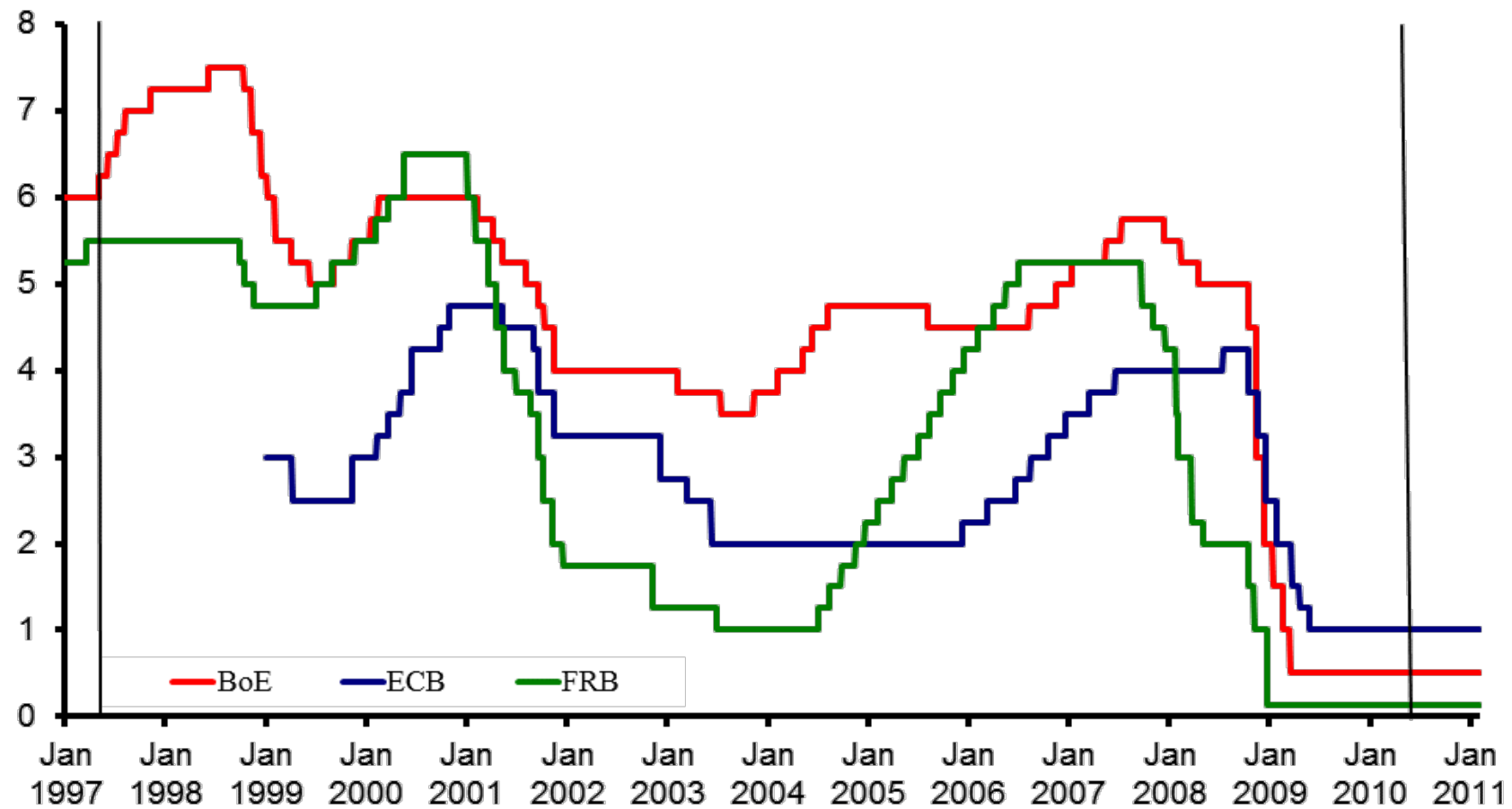


Figure 1: Policy rates

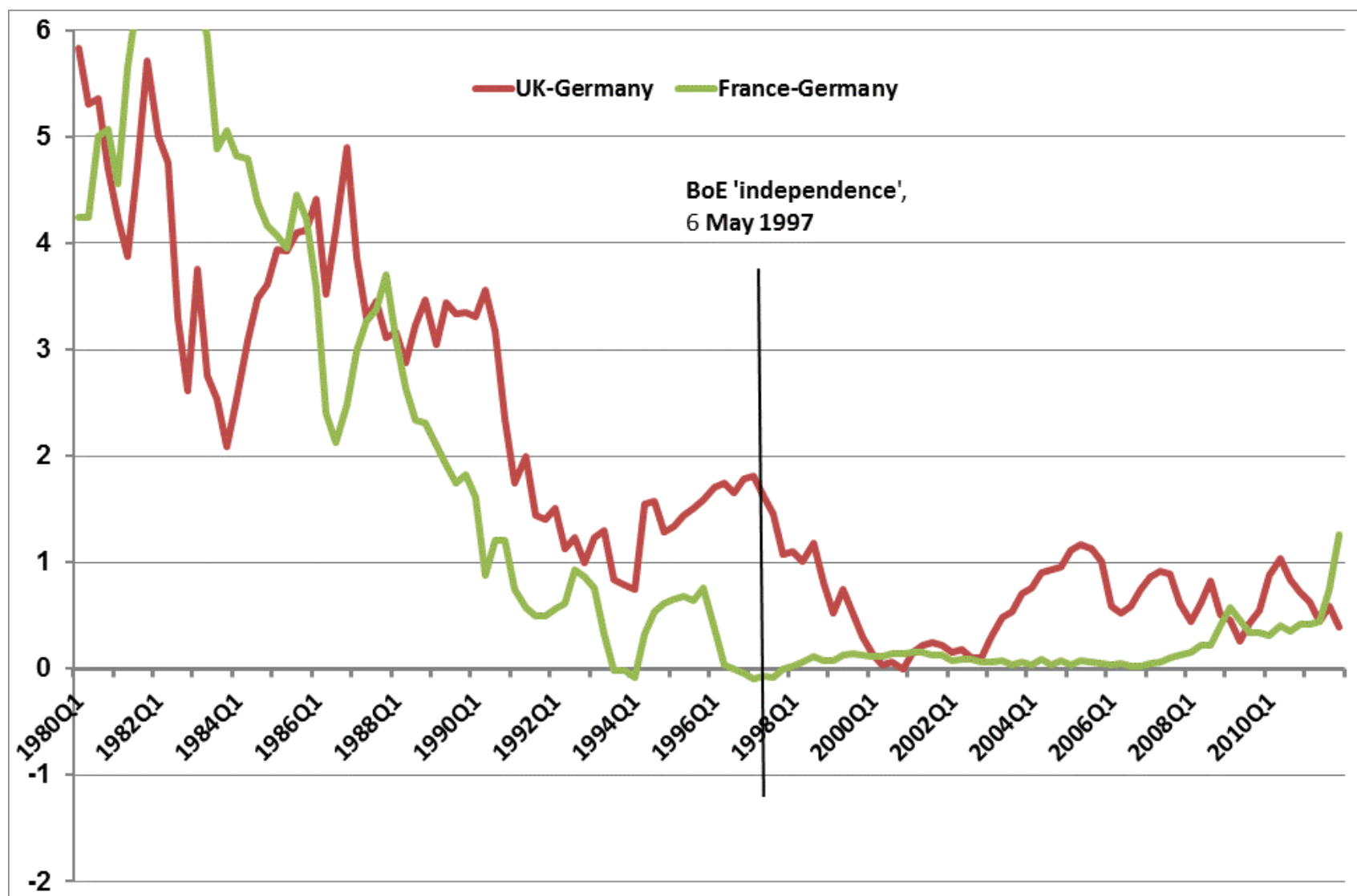


Figure 2: Spreads on government bonds

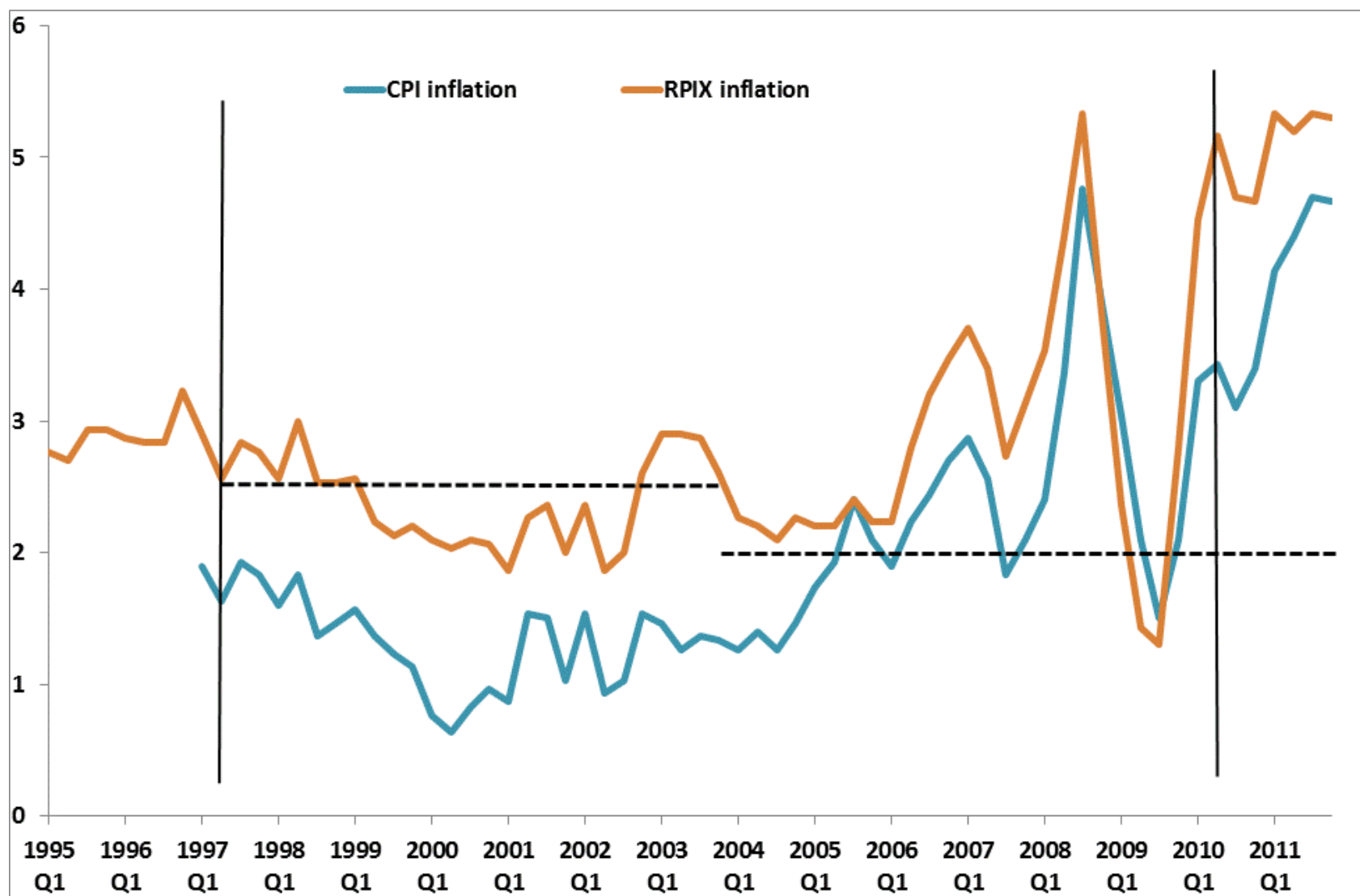


Figure 3: Inflation

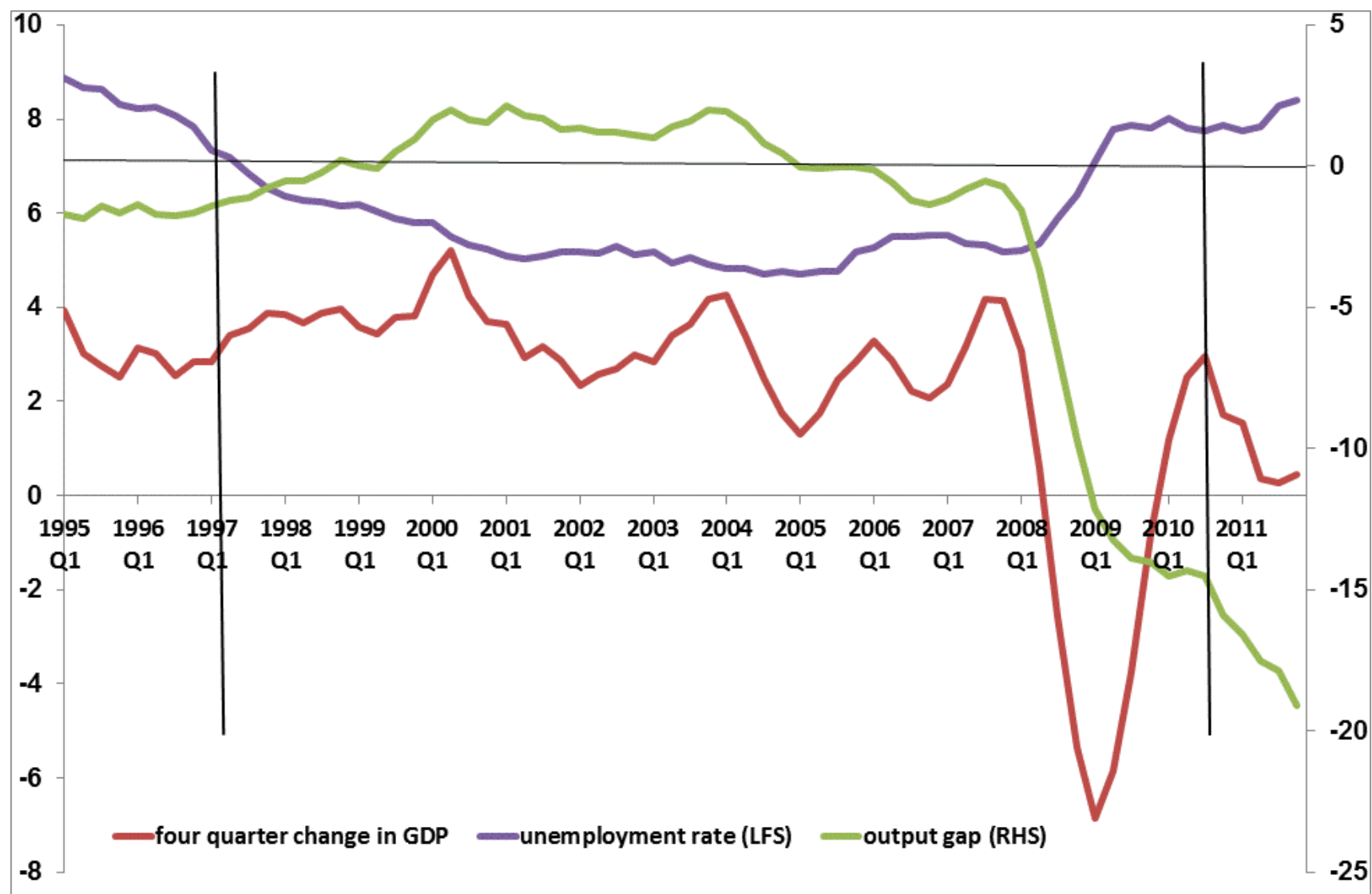


Figure 4: Real economic activity

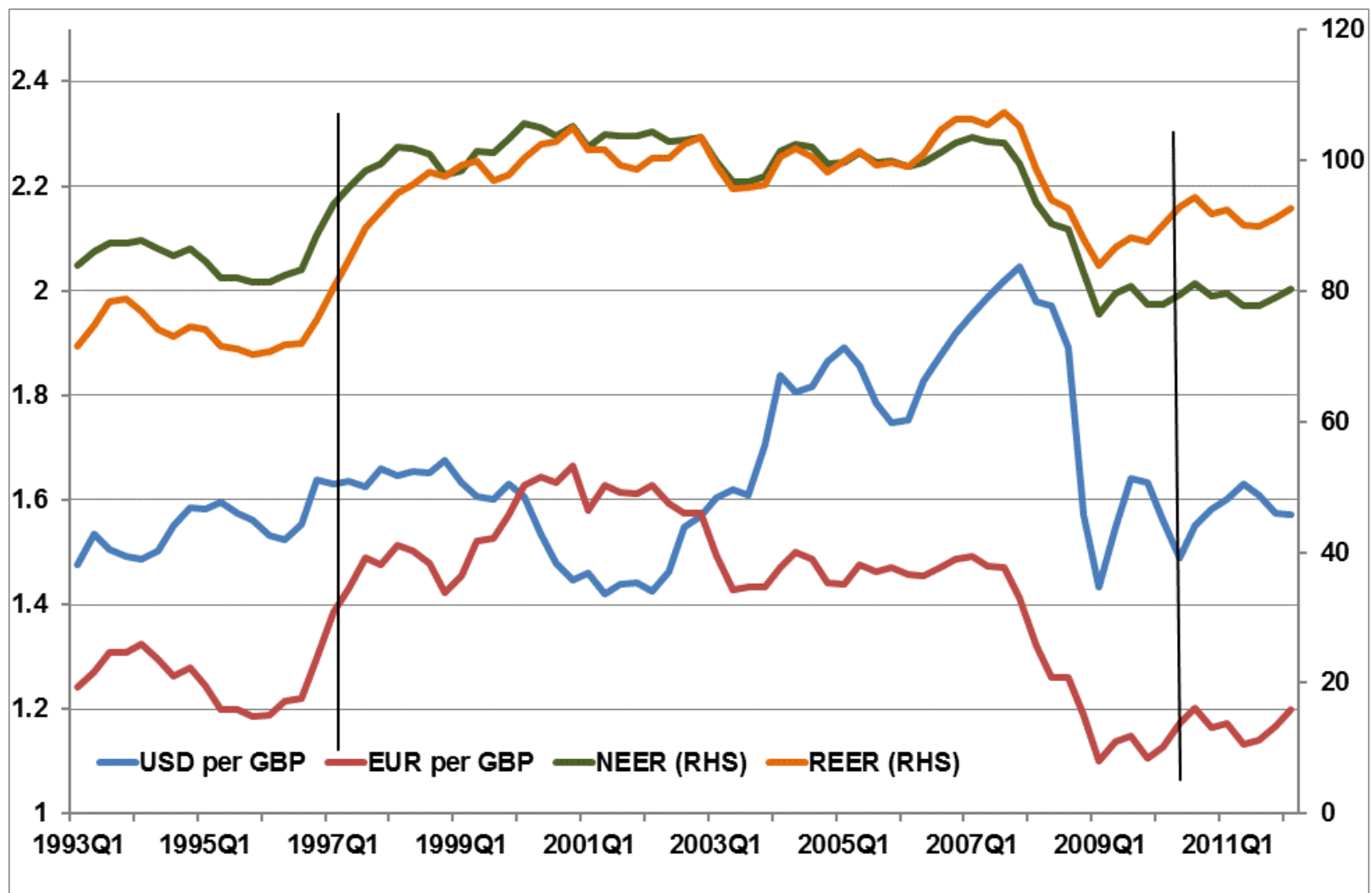


Figure 5: Exchange rates

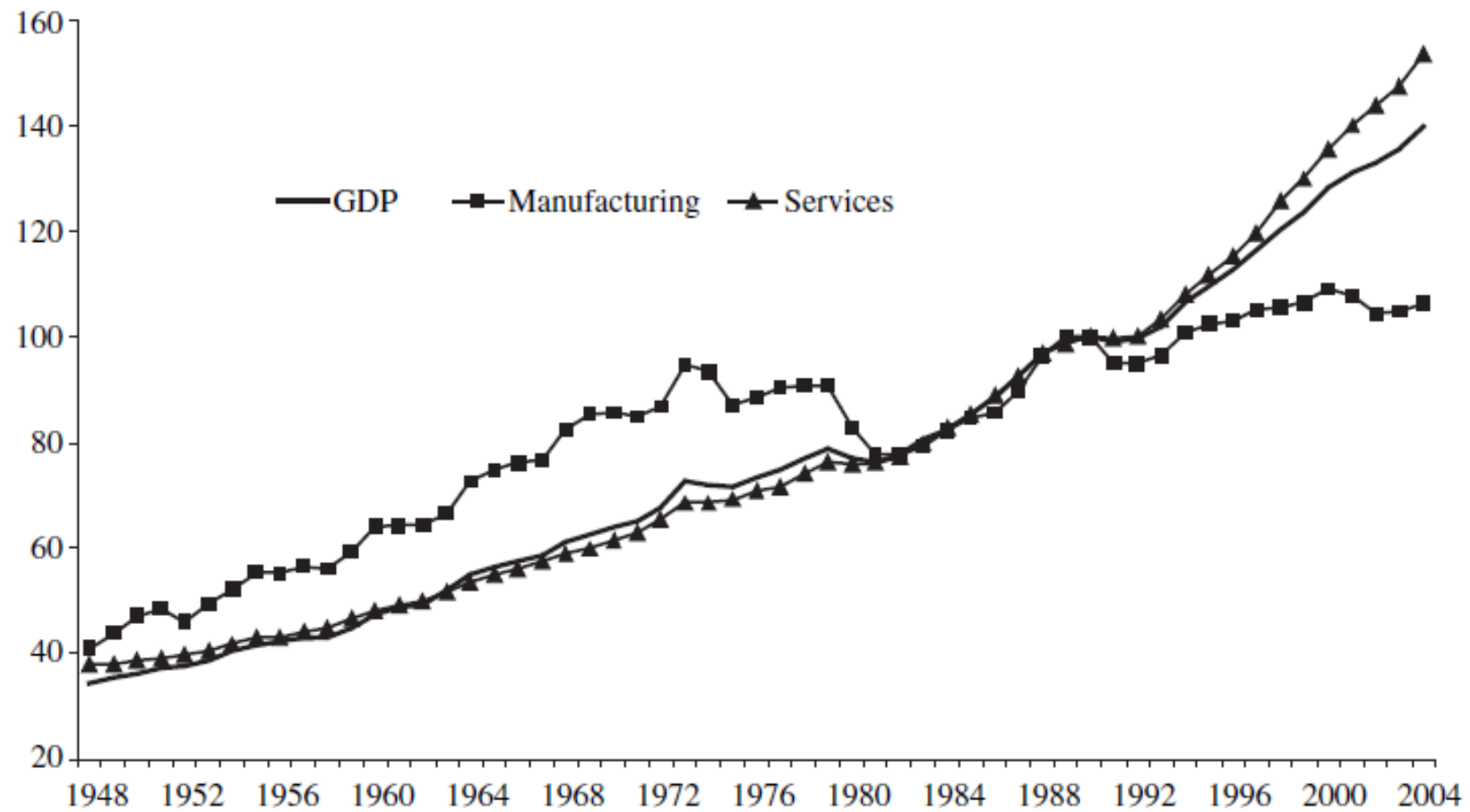


Figure 6(a): GDP, manufacturing and services, 1948-2004
Source: Cobham (2006)

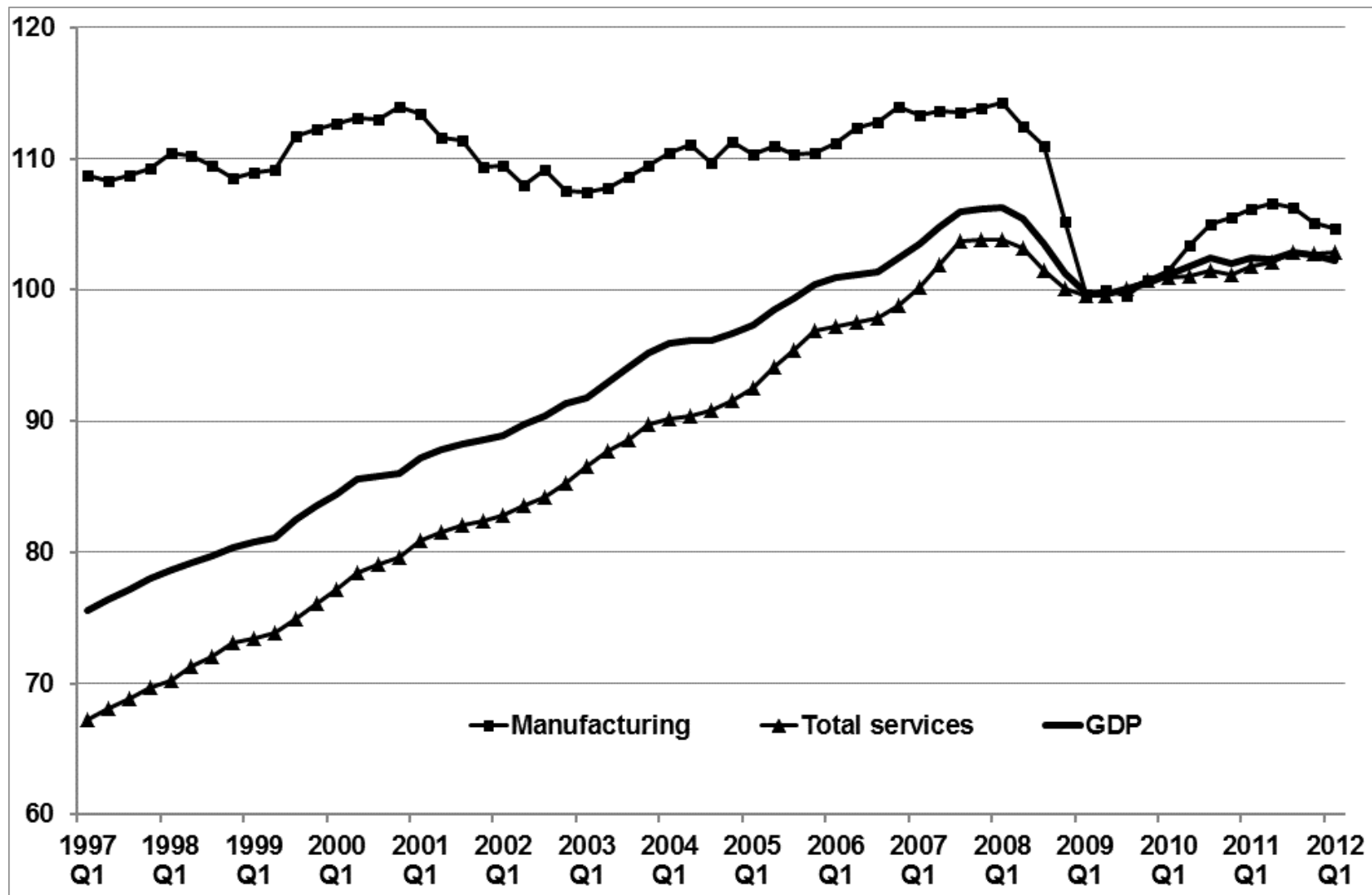


Figure 6(b): GDP, manufacturing and services, 1997-2012

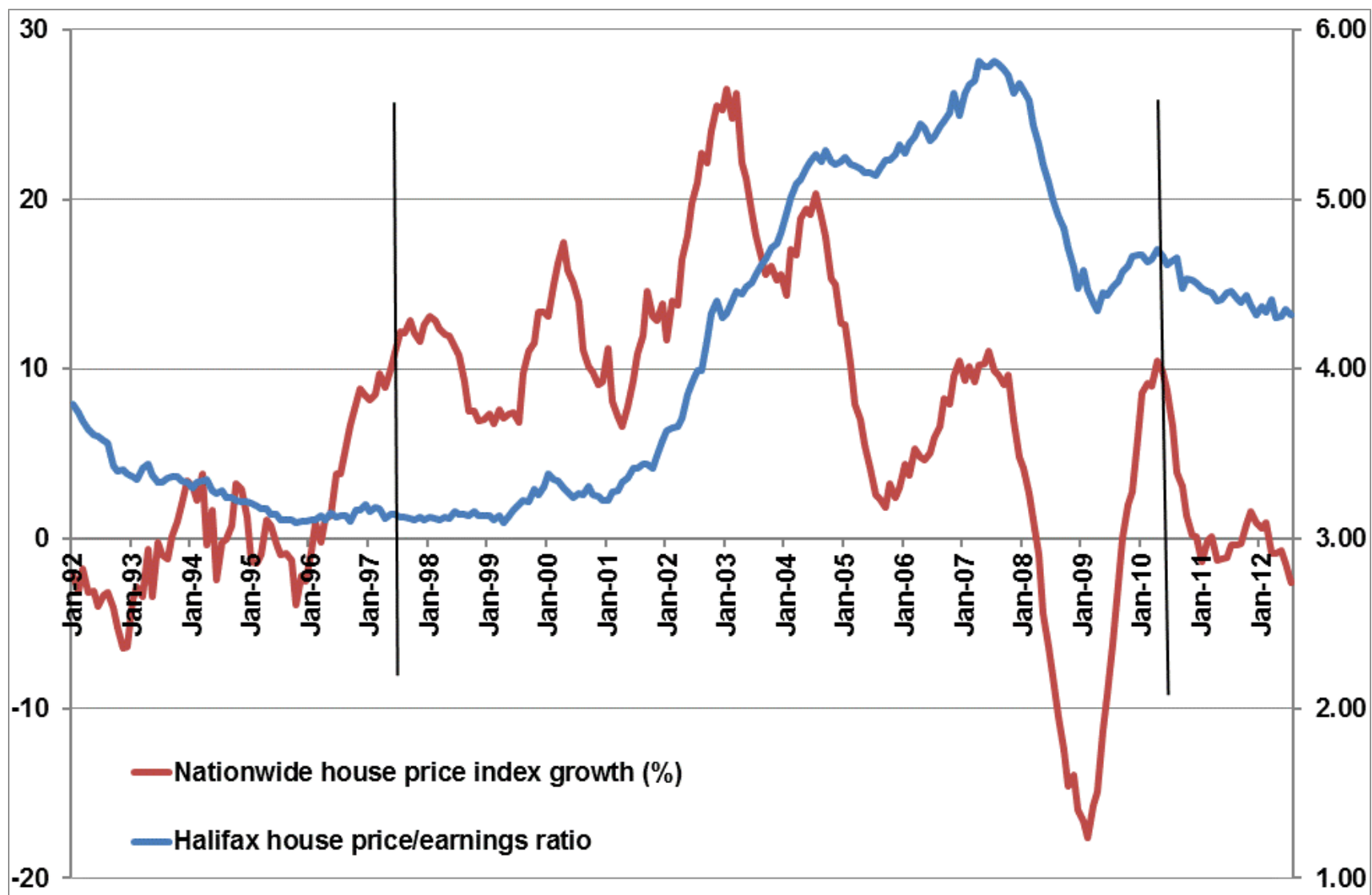


Figure 7: House prices